River Publishers

Energy-efficient Buildings in the Mediterranean: Challenges, Strategies, and Innovations

Editors:

Ioannis Vardopoulos, Directorate of Technical Services for Buildings, Greece

Constantinos Vassiliades, Neapolis University Pafos, Cyprus

This volume reimagines the built environment not as a passive backdrop, but as a contested site where architecture, engineering, climate extremes, energy imperatives, and socio-economic inequalities converge. Sustainability is shown not as a universal mandate, but as a condition continually negotiated across uneven terrains of policy, design, and everyday inhabitation.

Through contributions from leading scholars, the book examines Mediterranean cities to reveal the fractured foundations of the energy transition: fragmented regulations, misaligned certification systems, undervaluation of thermal performance, and urban fabrics that both resist and demand reinvention.

Rejecting linear narratives and technocratic reductionism, the volume emphasizes the tensions between techno-optimism and the economic, infrastructural, and cultural inertias that delay transformation. Rather than offering prescriptive closure, it invites readers to grapple with contradictions that render the Mediterranean city both a site of impasse and a laboratory of renewal in the shadow of climate crisis.

TABLE OF CONTENTS

- Energy-active Architectures and the Struggle for Sustainable Mediterranean Cities
-
- Photovoltaic-integrated Double Façades and the Future of Energy-autonomous Buildings
- Overcoming Socio-economic Barriers to Bioclimatic Design Adoption
- Sustainability in Multi-storey Buildings: Architecture, Energy, Ecology
- Modeling Bias and Energy Use Realities in Mediterranean Housing
- Building-integrated Photovoltaic Impacts on Mediterranean Urban Microclimates
- Renewable Energy Adoption and Real Estate Dynamics: A Homeowner-centric Study
- Sustainable Cities and Architecture in Action: Ground-breaking Energy-efficient Case Studies



River Publishers Series in Energy Sustainability and Efficiency

ISBN: 9788743809777
e-ISBN: 9788743809760
Available From: November 2025
Price: $ 140.00

KEYWORDS:
Sustainable urban development; urban microclimate; green infrastructure; bioclimatic architecture; climate-responsive architecture; ecological design; passive design strategies; energy-active design; energy autonomy; net-zero buildings; energy transition; energy policy; building-integrated photovoltaics; double faÃ§ades; thermal comfort; high-rise sustainability; spatial morphology; socio-economic barriers; homeowner behavior; consumer decision-making; real estate; Mediterranean

www.riverpublishers.com
marketing@riverpublishers.com